11/C(A:E)

Application number:

09/893,952

Application filed:

2001 June 28 Charles Vann

Applicant: Title:

Orientation and Position Sensor

Examiner:

Hien X. Vo

Date:

June 25, 2003

Amendment Continuation

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

In response to Advisory Action mailed March 2003, please amend the above application as follows: Cancel claims 4-7. Add the following claims.

8. A position and orientation sensor, comprising:

an alignment target having a first optical feature a fixed distance from a second optical feature;

(NE)

an imaging device that can form an optical image of said alignment target with said first feature in focus and said second feature out of focus;

whereby the location and size of said first feature compared to the location and size of said second feature in said optical image are measurements of up to three orthogonal positions and up to three orthogonal orientations of said alignment target with respect to said imaging device.

9. The sinsor of claim 1 wherein one or more of said features is a

cross hair.

- The sensor of claim 1 wherein said imaging device comprises a lens and a transparent projection screen.
- The sensor of claim 1 wherein said imaging device is a camera.
- 12. The sensor of claim 1 further including a monitor connected to said imaging device.
- 13. The sensor of claim 1 further including a computer connected to said imaging device.

Conditional request for constructive assistance

If for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the examiner pursuant to M.P.E.P. & 2173.02 and 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Sincerely,

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